Documents Not Before ALJ

- Sample of newly-found documents from back-up tapes
- Documents from Infineon case re: Spoliation of Evidence (recently admitted to record)
- ? Documents that are missing or withheld per Rambus Privilege Log (CX5117)*

*Indicates document listed in CX5117

NOTE: Timeline Not to Scale

? * 12/6/91: Tate: legal advice of Rambus counsel regarding patent issues

R1264306 (CX5100): 3/16/92: "Need/Strategy re advising JEDEC on claim(s) in our filed patents that cover proposals before JEDEC"

? * 3/26/92: Roberts: requesting information for ... legal advice regarding JEDEC

? * 4/4/92: Tate: legal advice ... on patent issues

? * 4/6/92: Crisp: legal advice ... regarding patent issues

R1264297 (CX5101): 5/19/92: "JEDEC What obligation do we have to advise JEDEC that we have filed but unissued patents that sync do/may infringe?"

? * 5/28/92: Email: Roberts: request for legal advice ... regarding possible patent amendments

R2531538 at 45 (CX5102): 6/25/92: "JEDEC Strategy: Goal: To leverage the JEDEC committee to our advantage ... on the SDRAM effort ... Patent claims that SDRAM ... may conflict with:"

R1342995-96 (CX5103): 6/25/92: "Rambus Board Agenda: ... Strategy re JEDEC/Sync DRAM- how to neutralize (or take advantage of)"

R1264264 (CX5104): 8/26/92: "Richard [Crisp] will work to add modifications to our patents to provide better coverage ... against Ramlink/ Sync DRAMs."

? * 10/19/92: Email: Mooring: request for legal advice ... regarding JEDEC disclosure policy

? * 10/20/92: Email: Crisp: legal advice ... regarding JEDEC disclosure policy

? 10/27/92: Crisp: Board of Directors Presentation

? * 11/2/92: Email: Tate: seeking information and legal advice ... regarding possible additional patent claims

? * 11/23/92: Tate: request for legal advice ... regarding patent issues

R1256938 (CX5105): 12/11/92: "I know that JEDEC takes the position that we should disclose [patents pending]"

R1252307 (CX5106): 1/12/93: "Objectives meeting ... patents – vs. SDRAM positioning vs. competitive alternatives"

? Vincent's '651 files

R1256855 (CX5107): 3/5/93: "The [JEDEC] rules ask members to [disclose] any patents they may relate to standardization issues ... IT DOES NOT REQUIRE YOU TO DO SO."

? Vincent's '692 files

? Vincent's '646 files

R1256882 at 84 (CX5108): 9/14/94: "I wonder what will happen when we have to sue someone in the future?"

R2506974 at 77 (CX5109): 10/25/94: "Are we ready to defend patent lawsuits? To file them?"

? Vincent's '961 files

R1255253 at 64 (CX5110): 4/3/95: "IP ... objectives ... – block/get royalties from competitive memory ... – extend our IP ... for future leverage"

? Vincent's '490 files

R1256853 (CX5111): 5/25/95: Barth: "In my opinion we should not provide a list of patents to JEDEC"

? * 6/5/95: Barth: legal advice ... regarding status of patent claims

? * 7/19/95: Roberts: request for legal advice ... regarding possible patent claims

R1315625 (CX5112): 8/2/95: Barth: "patent work continues; ... working with Richard Crisp on enhancing claim coverage"

? * 9/7/95: Diepenbrock: providing legal advice regarding draft statement at JEDEC meeting concerning patent position

? * 9/7/95: Crisp: requesting legal review of draft statement at JEDEC meeting concerning patent position

R1256940 (CX5113): 9/11/95: Crisp: the reason for the JEDEC patent policy: "if they were to standardize something that has a patent on it ... they potentially have an antitrust situation on their hands."

? * 9/26/95: Diepenbrock: legal advice regarding [patent issues]

? * 10/5/95: Diepenbrock: legal advice regarding estoppel issues

R1264319 at 20 (CX5114): 11/8/95: Toprani: 2nd day schedule: "4. Intellectual Property 1 hour ... What should our litigation tactics be? Should we go after anyone? If so who first? (Crisp)"

? Crisp slides: litigation tactics

? Vincent's '692 files

? * 1/9/96: Diepenbrock: legal advice regarding patent issues

? * 3/6/96: Diepenbrock: legal advice regarding patent infringement defense

? * 3/20/96: Diepenbrock: Draft letter ... reflecting legal advice regarding JEDEC

? * 3/28/96: Diepenbrock: legal advice regarding Rambus patent claims

? * 3/27/96: Crisp: legal advice ... regarding draft letter to JEDEC

? * 4/23/96: Diepenbrock: Summary of patent application

? * 5/1/96: Diepenbrock, legal advice regarding status of patent applications

? * 5/3/96: Diepenbrock: legal advice regarding antitrust and patent issues

? Vincent's '327 files

R2966999 (CX5115): 11/6/96: [Panel]: "How does our IP issued/in process block ... SDRAM-2 ... Richard [Crisp]"

R2833478 at 79 (CX5116): 11/96?: [Panel]: "Hazards with [standards] groups including IP as exemplified by JEDEC and Synclink - Crisp"

? Crisp Slides: IP Hazard with JEDEC

CX5007: 2/12/98: "Licensing/ Litigation Strategy ... Make ourselves battle ready. Start gathering critical documents ... Need ... document retention policy."

CX5005 at 2: 2/23/98: "a tiered litigation strategy has been developed ... Rambus may elect to file a patent infringement suit."

CX5006 at 3: 3/2/98: "Licensing and Litigation Strategy ... patent suit can be brought in venue of our choice: ITC; Northern California; Eastern District of Virginia"

CX5054 at 8: 3/2/98: "Licensing and Litigation Strategy ... create document retention policy ... prepare discovery database ... organize prosecuting attorney's files" for issued patents

CX5015: Q298: "IP Litigation Activity ... Propose policy for document retention – Done"

CX5010 at 6: 7/22/98: Horror Stories: "Deleted" email message used to prove age discrimination case

CX5010 at 2: 7/22/98: "BEFORE LITIGATION: A Document Retention/ Destruction Policy"

CX5011 at 2-3: 10/98: "Continue In Stealth Mode during '99 ... We should not assert patents ... until [RDRAM] ramp reaches a point of no return"

CX5022 at 4: 4/5/99: Vincent: "Clean out all the Rambus files that have issued."

CX5033: 4/19/99: "11 of 49 issued patent files ... have been cleared – secretary assigned full time to file clearance"

CX5036 at 2: 5/13/99: Vincent cleaned out his files for the '651 application

CX5012 at 13: 6/99: "Choose one company to litigate with during Q1/00. (New): Commence litigation during Q2/00"

CX5045: IP Q3'99 Goals-FIRST CUT 6/27/99: "Licensing/ Litigation Readiness ... Organize 1999 shredding party at Rambus"

CX5013 at 6: 1999: PREPARATION FOR LITIGATION ... Complete discovery data base

CX5036 at 1: 7/23/99: Vincent cleaned out his files for the '327 patent and '646 application.

CX5019 at 4: 9/24/99: "Even if we gain some initial settlements, we will have to ultimately pursue remedies in court"

CX5013 at 2: 1999: "'327 –covers DDR (dual edged clocking); '481 covers DDR (PLL circuitry); '580 covers DDR and [SDRAM] ([CAS latency])"

CX5003 at 6: 10/14/99: "Target Selection- Legal/Business ... Hitachi 117 pts; Samsung 109 pts; Hyundai 105 pts; NEC 103 pts; Micron 101 pts"

CX5036 at 2: 6/23/00: Vincent cleaned out his files for the '692, '490 and (apparently) '961 applications.

CX5032 at 58: 12/28/00: "Certificate of Destruction We Hereby Confirm That The Documents, Records, Files, Etc., ... Have Been Permanently Destroyed ... Shred contents of 460 Shred Bags"

CX5031: 1/12/01: "...this time the IP group will attempt to execute the [new document retention] policy more effectively."

1989 | 1990 | 1991 | Jan. Feb. 1992 Mar. Apr. | May June 1992 July Aug. | Sept Oct. 1992 Nov. Dec. | 1993 | Jan. Feb. Mar. 1994 Apr. May June | July Aug. Sept. 1994 Oct. Nov. Dec. | Jan. Feb. 1995 Mar. Apr. | May June 1995 July Aug. | Sept. Oct. 1995 Nov. Dec. | Jan. Feb. 1996 Mar. Apr. | May June 1996 July Aug. | Sept. Oct. 1996 Nov. Dec. | 1997 | Jan. Feb. 1998 Mar. Apr. | May June 1998 July Aug. | Sept. Oct. 1998 Nov. Dec. | Jan. Feb. Mar. 1999 Apr May June | July Aug. Sept. 1999 Oct. Nov. Dec. | 2000 | 2001

Documents Before ALJ

- Documents from Rambus Business Files
- Documents found on abandoned hard drive in Richard Crisp's attic
- Documents from Lester Vincent's chron. file
- Documents from forgotten file on Rambus server (not available to Federal Circuit)

CX0533 at 19: 6/26/89: Business Plan: "RamBus must be established as a standard to effect large royalty payments"

CX0533 at 15: 6/26/89: "Once a DRAM or vendor has committed to an architecture unlikely to change."

CX0602 at 2: 12/10/91: Application for Membership: "We agree to participate in the activities of...EIA/JEDEC ... and to pay an annual fee"

Rambus joins JEDEC

RX-1284: 2/27/92: Garrett "Fujitsu indicated that they do have patents applied for, but that they will comply with the JEDEC requirements ... !!!"

CX1941 at 1: 3/25/92: Vincent: "JEDEC-said need preplanning before accuse others of infringement ... - Advising JEDEC of patent application"

CX1942: 3/27/92: Vincent: "I said there could be equitable estoppel problem"

CX1946: 5/2/92: Vincent: "Richard Crisp wants to add claims to original application" regarding CAS latency and maybe burst length

CX1947: 5/29/92: Vincent: "Richard [Crisp] has claims for cases we have filed plus claims for divisionals."

CX0543A at 17: 6/18/92: Business Plan: "Sync DRAMs infringe on some claims in our filed patents ... there are additional claims we can file ... that cover features of Sync DRAMs."

CX1949: 9/25/92: Vincent: Crisp proposed claims covering programmable latency "so cause problem with synch DRAM" as well as claims covering on-chip PLL

CX0545 at 21: 9/28/92: Business Plan: "Sync DRAMs infringe claims in Rambus' filed patents and other claims that Rambus will file"

CX0606 at 2: 10/27/92: B/D Minutes: "Mr. Crisp reported on the SDRAM status at JEDEC, [and] the Rambus patent strategy"

RX-0359: 12/11/92: Mooring: IBM ... [said] "some ... [offenders] have patents pending on SDRAMs that they have not made the commitee [sic] aware of."

CX0686: 2/9/93: Crisp: planning claims covering programmable CAS latency and on-chip PLL/DLL

CX1958 at 12: 5/4/93: "Two possible theories for non-enforcement: 1) Estoppel? 2) Antitrust?"

CX0702: 6/18/93: Ware: claims covering "programmable CAS latency" are "directed against SDRAMs;" claims covering PLL are "directed against future SDRAMs"

CX0711 at 1: 10/5/93: Crisp: "TI was chastized for not informing JEDEC that it had a 1987 patent"

JEDEC Publishes JEP 21-I Manual

CX1970: 1/10/94: Vincent (with CEO Tate, CFO Harmon, VP Roberts): "Enforcement- Sink DRAMs ... Programmable latency-PLLs"

CX0711 at 16: 3/9/94: Crisp: "Micron says the [JEDEC disclosure] policy exists due to anti-trust concerns."

CX0726: 3/15/94: Mooring: "I propose we kick-off another patenting spree focused on ... controller[s]"

CX0734: 5/5/94: Roberts: "We ... feel we can enhance our claim coverage ... 1.0 Use of both edges of the clock"

CX0711 at 27: 5/27/94: Crisp: "many ... [JEDEC] SDRAMs use an externally supplied reference voltage ... we have a claim we added to cover this"

CX0738: 6/16/94: Dillon: "For SDRAMs, ... patenting [auto-precharge] would have high harassment value"

CX0746: 8/1/94: Roberts: "This [646 application, dual edge clocking] is Lester's attempt to work the claims for the MOST/SDRAM defense."

CX0711 at 36-37: 9/14/94: "JEDEC #3 (NEC PROPOSES PLL ON SDRAM!!! ... What is the exact status of the patent with the PLL claim?"""""

CX0757: 9/14/94: Roberts: "So if we want to fight this one (after the [PLL] claim is issued), we better stock up our legal warchest."

CX0757: 9/14/94: Crisp: "It seems likely we will have to fight litigation [on PLLs and programmable CAS latency] at some point in the future"

CX0763: 10/25/94: Crisp: "I would hope we would sue other companies [for using on-chip PLL]"

CX0783 at 2: 2/26/95: Crisp: "I especially do not want it [Rambus's intellectual property issue] all over JEDEC."

CX0711 at 52, 54: 3/14/95: Crisp: "the STBUS scheme [proposed at JEDEC] ... may well infringe our patents"

CX0711 at 65,68: 3/15/95: Crisp: JEDEC members "may get into patent trouble if they do this [source synchronous clocking]!"

CX0711 at 61: 3/23/95: Crisp: Hyundai's "#1 issue with ... [RDRAMs] is the royalty rate. They do not want to be straddled with 3% royalties."

CX0208A: 5/95: JEDEC Manual [from Rambus files]: "the obligation of all participants to inform ... [JEDEC] of any patents, or pending patents, that might be involved in the work they are undertaking"

CX0711 at 68, 73: 5/24/95: Crisp: "It makes no sense to alert them to a potential [patent] problem they can easily work around."

CX0798: 6/5/95: Barth: listing patent application files for Crisp to review.

CX0711 at 110, 113-14: 6/15/95: Crisp: "It is essential that we be absolutely sure we have the [SyncLink] standard adequately covered by patents"

CX0711 at 166, 167: 9/11/95: Crisp: "I also reminded [JEDEC] that we have actually reported a patent to the committee in the past ..."

CX0831: 9/12/95: Tate: "tony's #1 objective...[is] to strengthen our IP position relative to competition." Please send him JEDEC meeting reports.

CX0835: 9/22/95: Roberts: "Let the IP war begin"

CX0837 at 1-2: 9/23/95: Crisp: "Tony's worst case scenario regarding [equitable] estoppel ... we should tell [JEDEC] what patents have issued ... to be clean on this."

CX0711 at 187: 12/5/95: Crisp: "Hitachi stated that they had a patent [at time of balloting] ... This created a big ruckus."

CX1990: 12/19/95: Vincent: "the [FTC] charged that Dell restricted competition ... by threatening to exercise undisclosed patent rights against computer companies adopting ... the standard."

CX0858 at 2: 1/22/96: Crisp: "I understand the concerns about the [JEDEC] patent policy and some potential exposure we could have in the event of a future litigation."

CX1999: 1/24/96: Vincent: "Try to get broad & narrow claims [on on-chip DLL]"

CX1928: 1996: Vincent: "No further participation in any standards body ... - do not even get close!!"

CX0867: 2/15/96: Tate (with respect to SDRAMs): "prepare the minefield"

CX0868: 2/20/96: Crisp: "we should have a long hard look at our IP and if there is a problem ... we should tell JEDEC"

CX0873: 3/20/96: Draft: "In the spirit of full disclosure, Rambus ... [lists for] JEDEC all issued US patents ... The list is complete"

CX2957: 5/15/96: Karp: "It is contrary to industry practice ... to remain silent ... [and] later ... assert that its [IP] covers the standard ..."

CX0887: 6/17/96: Final: "To the extent that anyone is interested in the patents of Rambus, I have enclosed a list" (but omitting the '327)

Rambus quits JEDEC

CX0903: 8/26/96: Crisp: "The job of JEDEC is to create standards which steer clear of patents ... whenever possible."

CX0919: 2/10/97: Tate: "do "NOT" tell customers /partners that ... DDR may infringe-our leverage is better to wait"

CX0939: 7/11/97: Davidow: "We have not yet told Siemens that we think ... SDRAM-DDR infringe our patents."

CX0942: 8/4/97: Tate: "our policy so far has been NOT to publicize our patents and i think we should continue with this."

CX0960: 10/1/97: Tate: Karp's role will be "to license our patents for infringing drams ... keep this confidential - don't tell partners/ customers/ press/anyone"

CX0963: 10/21/97: Tate: "currently we expect ... that both ddr sdram/sgram ... will infringe our patents ... Our strategy is to downplay the whole infringement/ IP issue"

CX0982: 12/16/97: Karp: "we are well protected with patents and must use whatever legal remedies we deem necessary to shut [infringers] down or have them take a license."

CX0987 at 4: 1/10/98: Tate: "ddr infringes our patents (question: do we start stating this publicly?)."

CX0988: 1/10/98: Karp: "I am very uncomfortable with any public statements regarding who or what infringes our patents."

CX0551: 2/12/98: Strategic Patent Licensing Program: "infringing products and their respective royalty rates ... DDR SDRAM 4.0% [3.0%]"

CX1744A at 36: 2/25/98: Karp (with Tate): "Litigation Strategy ... Working with J. Lau document retention policy, email, etc."

CX0613 at 2: 3/4/98: B/D Minutes: "Joel Karp ... updated the Directors on the ... strategic licensing and litigation strategy."

CX1005: 3/16/98: Roberts: "there is a growing worry about the email back-ups as being discoverable information."

CX1744A at 47: 3/18/98: Karp (with Tate): "Geoff's goals- ... - Shredding-talk with Ed- Document retention"

CX1016 at 6: 4/14/98: "[Intel] could force us to play our IP card with the dram companies earlier."

CX1032: 5/14/98: Roberts (describing Samsung's new DDR SDRAM): "This should make for some fun times if/when we enforce our IP on DDR."

CX1264: 7/98: "EMAIL-THROW IT AWAY Email Is Discoverable In Litigation ... LOOK FOR THINGS TO KEEP"

CX1044: 8/19/98: Larsen: "We have hired a shredding service to come to Rambus on Thursday 9/3. They are scheduled to be here all day."

CX1051: 9/2/98: Larsen: Thursday is Shred Day 1998 ... We will have a Shred Day Celebration ... at 5:00."

CX1744A at 141: 9/2/98: Karp (with Tate): "Doc. Retent- Geoff [Tate] files? – Board members?"

Rambus Shred Day 1998

CX1052: 9/3/98: Karp: "It took about 5 hours to completely fill the shredding truck (capacity is 20,000 lbs)"

CX1059: 5/1/99: Karp: The industry "probably think they avoid our IP if they [don't use a packetized bus]"

1999 Shredding Party at Rambus

CX1379 at 4: 10/99: "Intel ... is enabling DDR ... We must be proactive on our IP with DRAM companies"

CX0623 at 4: 10/14/99: B/D Minutes: "Mr. Karp reviewed various strategic IP issues including target selection"

CX2887 at 2: 10/26/99: Intel Letter: "Intel has been forced to re-architect its chipset[s] ... to accommodate [SDRAMs]"

CX1079: 10/28/99: Crisp: hoping someone has a DDR datasheet "that hasn't fallen victim to the document retention policy :-)"

CX1084: 11/19/99: "ddr meaning ... Doubled DRAM Royalties (for Rambus)"

CX1364: REDACTED

CX1109: 4/3/00: Letter to Mitsubishi: "Rambus owns patents ... [covering] features implemented in Single Data Rate and Double Data Rate SDRAMs"

CX1371: 4/5/00: Demand to NVIDIA at 33-36, 41-43 (applying patents to JEDEC standards); 119, 125 (listing '327 patent)

CX1127: 6/23/00: Letter to Infineon: "Rambus owns patents ... [covering] features implemented in single data rate and double data rate...SDRAM"

CX1379 at 13: 8/8/00: "Rambus Policy ... Settle-Now-Best terms Later-Higher ... Fight Then settle - Even higher terms Until decision-No guarantee of a license"

CX1867: 8/8/00: Rambus Complaint v. Infineon (E.D. Va.)

CX1386 at 8: 9/15/00: "Solidify the Franchise" "Collect royalties on all DRAM and controllers forever"

Shred Day 2000